

Claims

1. A method for forming one or several material layers inside a basic tube (1), which basic tube (1) is used in the manufacture of an optical fiber preform, **characterized** in that the method comprises one or several sequences, which sequence comprises the following steps in which
 - 5 - an electrical charge is arranged in a first material,
 - the electrically charged first material is guided inside the basic tube (1),
 - 10 - a charge is arranged on the inner surface of the basic tube (1) by arranging the charge from the first material on the inner surface of the basic tube,
 - guiding of the first material inside the basic tube is finished,
 - 15 - an electrical charge is arranged in a second material, said charge being opposite to the charge of the first material,
 - the electrically charged second material is guided inside the basic tube (1),
 - 20 - the charged second material is brought on the inner surface of the basic tube (1) and
 - guiding of the second material inside the basic tube is finished.
- 25 2. The method according to claim 1, **characterized** in that the first material comprises at least carrier gas, and the second material comprises at least particulate constructional material that forms the material layer.
- 30 3. The method according to claim 1, **characterized** in that the first material and the second material comprise at least particulate constructional material that forms the material layer.
- 35 4. The method according to any of the claims 1, 2 or 3, **characterized** in that the first material and the second material are guided to the basic tube (1) from the same end of the basic tube.

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5. The method according to any of the claims 1, 2 or 3, **characterized** in that the first material is guided to the basic tube (1) from the first end of the basic tube and the second material is guided to the basic tube from the second end of the basic tube.

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6. A manufacturing apparatus for forming one or several material layers inside a basic tube (1), which basic tube is intended to be used in the manufacture of an optical fiber preform, said manufacturing apparatus comprising means (4) for charging the first material electrically, **characterized** in that the manufacturing apparatus also comprises at least

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- means for guiding the first material inside the basic tube for charging the basic tube,
- means (4) for charging the second material electrically in such a manner that the first and the second material have opposite charges,
- means for conveying the second material inside the basic tube and;
- means for alternating the first and the second material to be guided inside the basic tube.

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7. The manufacturing apparatus according to claim 6, **characterized** in that the manufacturing apparatus also comprises a first charger (4) for charging the first material and a second charger (4) for charging the second material.

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8. The manufacturing apparatus according to claim 6, **characterized** in that the manufacturing apparatus also comprises one charger (4) whose polarity is changed sequentially for charging the first material and the second material.

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9. The manufacturing apparatus according to any of the claims 6, 7 or 8, **characterized** in that the charger (4) is a corona charger.

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10. The manufacturing apparatus according to claim 6, **characterized** in that the manufacturing apparatus comprises at least one particle forming unit (6) that is arranged to form particles in the gas flow.

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11. The manufacturing apparatus according to any of the claims 6, 7, 8, 9 or 10, **characterized** in that the particle forming unit (6) is a DND burner.

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